NAVAL DISEASE REPORTING SYSTEM (internet)

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Background

- Reportable Medical Event Surveillance (RME) and Force Health Protection
  - Rooted in international, national, and federal policy
  - Monitoring of select diseases
- Purpose of RME
  - Ensure timely and adequate response
  - Identification of emerging or re-emerging diseases and other threats
  - Estimation of: Distribution, Trends, Risks
  - Development and assessment of policy and resource allocation

Navy Medical Event Surveillance

- Required reporting of ~80 conditions
  - BUMED instruction 6220.12a, 21 OCT 1998
  - Active duty and beneficiaries
  - Applies to all navy and marine ships, stations and units providing outpatient or inpatient medical care
- Current reporting process
  - Electronic reporting via NDRS (Naval Disease Reporting System) and SAMS

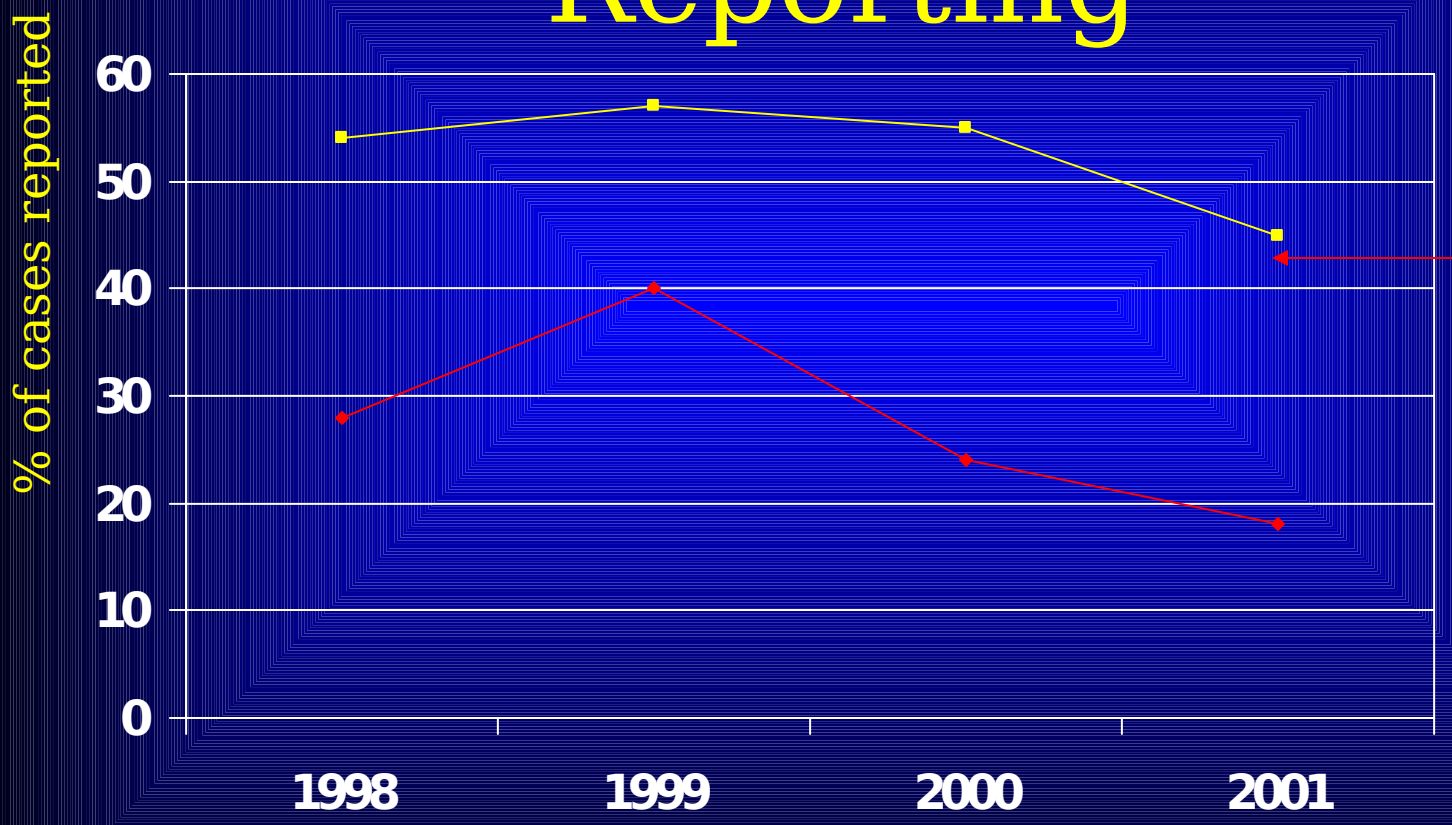
Naval Disease Reporting System (NDRS)

- Priori to 1997: Disease Alert Reports
- 1997: NDRS
  - Allowed e-mail “automated reporting” in addition to snail-mail, faxes and messages
- Access-based program
- Data entered into local database (MTF)
- Data exported, zipped, password protected and sent via email to NEPMU/NEHC

NDRS

- Year 2000 challenges
- Increased IM/IT security measures
- NEHC study (2001): 50% of Medical Event Reports (MERs) in NDRS did not reach NEHC

Hospitalized Medical Events – Completeness of Reporting*



* Army Medical Surveillance Activity. *Medical Surveillance Monthly Report*. 2002; 8(5):27-30.
** Navy Environmental Health Center. *Naval Medical Surveillance Report*. 2002; 5(4):16-21.

NDRS

- Today
  - multiple patches, short term fixes
  - Can’t be networked
  - Quarantine of zip files; recent virus concerns
- NMCI – Unknown fate of Access programs
- Temporary fix
  - Transmission of NDRS zip files via FTP
  - From MTF to NEHC
  - Data sent from NEHC to NEPMUs
  - WHY?
- NMO: upload capability

SAMS

- ~2002 SAMS 8.0
  - MER module
- Challenges
  - Some aspects were not user friendly (export)
  - Case ID was set up incorrectly
  - MID could not support IT problems
- Few users: ships
- Updated SAMS versions do not have a functional MER module

NDRSi

- Purpose
  - Centralize and streamline disease reporting
  - Facilitate Disease Surveillance
- Objectives
  - Improve timeliness and completeness of reporting
  - Create a system that is simplified, flexible, easy to use
  - Achieve near real time reporting and visibility of MERs
  - Minimize requirements put upon field personnel
  - Eliminate network/transmission factors affecting NDRS and SAMS
  - Standardize surveillance and response throughout Navy and USMC med departments across all echelons of care

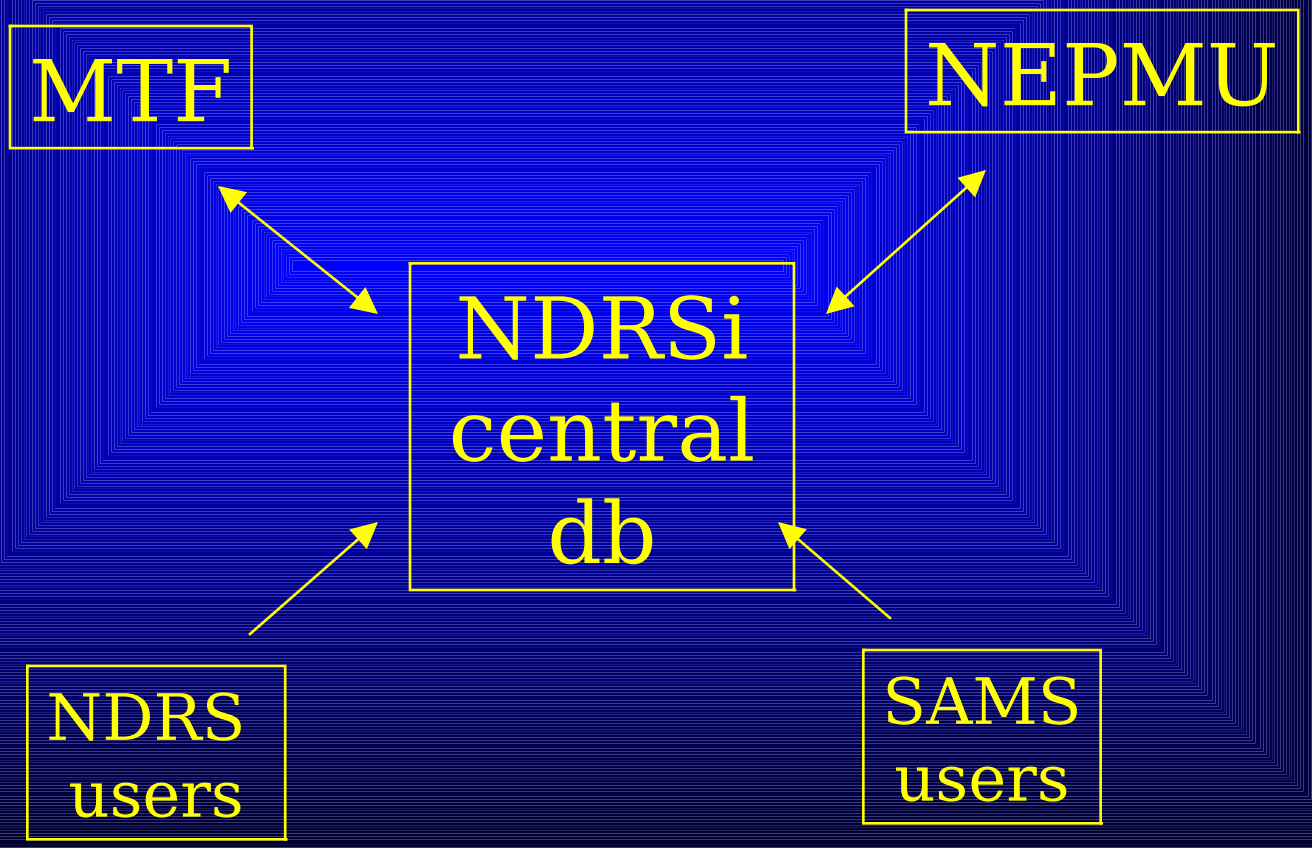
Going from a linear reporting model (NDRS)

...

Via Email

Via FTP

…to a centralized reporting model (NDRSi)



NDRSi

- Naval Med Info Management Center (NMIMC)
  - Designed by IM/IT specialists
  - Modeled after Fleet HRA
- Web-based
  - Report through secured internet site (NMO)
  - No software to download to individual PCs
  - Everyone is talking from one, central database
- Built in ORACLE 10g

NDRSi – Benefits

- Simplified
  - No chain of reporting
  - Only req'd data elements included (BUMED INST 6220.12a and triservice guidelines)
  - Elimination of extra stuff: rainbow form; PPD tracking; STD contact reporting
  - Less fields to enter: case status, lab, additional case questions (i.e. travel history, vaccine history)

NDRSi – Benefits

- Easy to Use
  - You can teach yourself via simple tutorials; no training requirements
  - Includes automatic input of demographic data after entering SSN/FMP; minimize data entry
- Flexible – changes are easy to make
  - System upgrades/changes are made once, and only on the central server
  - Improvements can be made at any time

NDRSi Features

- Medical Event Reports
  - Each Medical Event has a customized screen
    - Disease specific lab & applicable questions
    - Most MERs will only require medical event information to be entered
  - Basic MER screen structure
    - Demographics
    - Medical Event Information
    - Laboratory Information
    - Event Related Questions

DEMOGRAPHICS

Sponsor SSN 999999999 **Patient Name** WEILAND JOHN R **FMP** 20 **SEX** M

Race/Ethnicity: Caucasian **Date of Birth:** June 17 1957

Service Civilian **Permanent Duty Station** NAVMEDINFOMGMTCEN BETHESD **Rank/Paygrade** C13

MEDICAL EVENT

ICD-9 Description Food/Water Associated Illness - 005 **Date of Onset/Visit** 03/05/2004 **Reporting UIC**

Method of Confirmation **Case Status** **MER: Preliminary or Final?**

LABORATORY TESTS

note: uncheck box to clear radio buttons

Isolation of agent Negative Pending Positive Lab Date / Time:

Other Labs Not Listed

EVENT RELATED QUESTIONS

Please specify the agent involved and describe the event in the comments section

COMMENTS

Save Values

NDRSi Features

- Includes Local Health Department Reporting Capability
  - MERs exported as a text doc into a Canned report format
  - Ability for users to change the canned report format
  - Print, mail/fax to Local Health Department
- Reports/Feedback:
  - Download excel spreadsheet specific to MTF or Area of Responsibility (AOR) for given time frame
    - Make sure what you reported is in the system
    - Each entry has “PRINT MER” option

NDRSi Features

- Release: TBD
  - Limited by IT support
- Future plans
  - Outbreak Report Form in the near future
  - VAERS-1 Form will be added
  - Canned reports aggregating data for specific AORs/diseases/units as defined by users

Outcomes

- Increase capture of RME
- Enhance timeliness of capture
- Reduce PMT/NEPMU workload
- Ensure adequate response to urgent RMEs